We claim:

1. A detection device comprised of a hybrid nucleic acid assembly, wherein said hybrid nucleic acid assembly is comprised of a nucleic acid polymer, a first nanoparticle conjugated to said nucleic acid polymer, a second nanoparticle conjugated to said nucleic acid polymer, a means for introducing energy into said first nanoparticle, means for detecting energy from said second nanoparticle, and means for determining a physical property of said nucleic acid polymer.

2. The detection device as recited in claim 1 wherein said means for introducing energy into said first nanoparticle is a source of ultrasonic energy.

3. The detection device as recited in claim 1, wherein said first nanoparticle consists essentially of gold.

4. The detection device as recited in claim 3, wherein said second nanoparticle consists essentially of gold.

5. The detection device as recited in claim 1, further comprising means for producing a mechanical property which contains information regarding said physical property of said nucleic acid polymer.

6. The device as recited in claim 1 wherein said device is transfected into a cell.

7. The device as recited in claim 6 wherein said device is located within an organism comprised of more than one cell.

8. The device as recited in claim 6 wherein said cell is located in a cell culture apparatus.

9. A detection device comprised of a hybrid amino acid assembly, wherein said hybrid amino acid assembly is comprised of an amino acid polymer comprised of a proximal end and a distal end, a first antibody binding to a first antigenic site on said amino acid polymer, a

second antibody binding to a second antigenic site on said amino acid polymer, a first nanoparticle conjugated with said first antibody, a second nanoparticle conjugated with said second antibody, means for introducing energy into said first nanoparticle, means for withdrawing energy from said second nanoparticle, means for detecting the withdrawal of energy from said second nanoparticle, and means for determining a physical property of said amino acid polymer while said energy is introduced into said first nanoparticle.

10. The detection device as recited in claim 9, wherein said amino acid polymer is a protein.

11. The detection device as recited in claim 9, wherein said amino acid polymer is a peptide.

12. The detection device as recited in claim 9, wherein said first nanoparticle consists essentially of gold.

13. The detection device as recited in claim 9, wherein said second nanoparticle consists essentially of gold.

14. The detection device as recited in claim 9, wherein at least one of said first nanoparticle and said second nanoparticle is a nanotube.

15. The detection device as recited in claim 14, wherein said nanotube is a carbon nanotube.

16. The detection device as recited in claim 15, wherein said carbon nanotube is a single walled carbon nanotube.

17. The detection device as recited in claim 15, wherein said carbon nanotube is a double walled carbon nanotube.

18. The detection device as recited in claim 9, wherein said means of introducing energy into said first nanoparticle is disposed externally of said hybrid amino acid assembly.

19. The detection device as recited in claim 18, wherein said means of introducing energy into said first nanoparticle is a light source.

20. The detection device as recited in claim 18, wherein said means of introducing energy into said first nanoparticle is a laser.

21. The detection device as recited in claim 18, wherein said means of introducing energy into said first nanoparticle is a source of radio frequency energy.

22. The detection device as recited in claim 18, further comprising means for producing a radio frequency signal which contains information regarding said physical property of said amino acid polymer.

23. The detection device as recited in claim 18, wherein said means of introducing energy into said first nanoparticle is a source of mechanical energy.

24. The detection device as recited in claim 23, wherein said mechanical energy is ultrasonic energy.

25. The detection device as recited in claim 18, further comprising means for producing a mechanical property, which contains information regarding said physical property of said amino acid polymer.

26. The detection device as recited in claim 9, wherein said means for detecting the withdrawal of energy from said second nanoparticle is a photodetector.

27. The detection device as recited in claim 9, wherein said means for detecting the withdrawal of energy from said second nanoparticle is a radio frequency receiver.

28. The detection device as recited in claim 9, wherein said detection device is incorporated into an encapsulating agent.

29. The detection device as recited in claim 28, wherein said detection device is transfected into a cell.

30. The device as recited in claim 29 wherein said cell is located within an organism comprised of more than one cell.

31. The device in claim 30 wherein said cell is located in a cell culture apparatus.

32. A dendrimer-nucleic acid-energy detector complex wherein said complex is comprised of a dendrimer, a nucleic acid sequence and an energy detection device.

33. The complex as recited in claim 32 wherein said dendrimer consists essentially of a conductive polymer.

34. The complex as recited in claim 32 wherein said dendrimer has a shape form selected from the group consisting of a rod shape form, a spiral shape form, a star shape form, a starburst shape form, or a spherical shape form.

35. The complex as recited in claim 32 wherein said energy detection device is selected from the group consisting of a microvoltage potential detector, a transceiver, a microcurrent detector, an ultrasonic transducer, a microprocessor control unit, a nanoparticle sensor, a fluorophore, a chromophore, a nanotube, or a quantum dot.

36. The complex as recited in claim 32 wherein said dendrimer consists essentially of a metal.

37. The complex as recited in claim 32 wherein said dendrimer consists essentially of a polymer that is coated with nanoparticles of a material selected from the group consisting of metal or semiconductor.

38. The complex as recited in claim 32, wherein said complex is incorporated into an encapsulating agent.

39. The complex as recited in claim 32, wherein said complex is transfected into a cell.

40. The complex as recited in claim 39 wherein said cell is located within an organism comprised of more than one cell.

41. The device in claim 39 wherein said cell is located in a cell culture apparatus.

42. The complex as recited in claim 32 wherein said nucleic acid is a deoxyribonucleic acid.

43. The complex as recited in claim 32 wherein said nucleic acid is a ribonucleic acid.

44. The complex as recited in claim 32 wherein said nucleic acid is a single stranded nucleic acid.

45. The complex as recited in claim 32 wherein said nucleic acid is a double stranded nucleic acid.

46. The complex as recited in claim 32 wherein said nucleic acid is a complementary DNA.

47. A dendrimer-polypeptide-energy detector complex wherein said complex is comprised of a dendrimer, a polypeptide sequence and an energy detection device.

48. The complex as recited in claim 47 wherein said dendrimer consists essentially of a conductive polymer.

49. The complex as recited in claim 47 wherein said dendrimer has a shape form selected from the group consisting of a rod shape form, a spiral shape form, a star shape form, a starburst shape form, or a spherical shape form.

50. The complex as recited in claim 47 wherein said energy detection device is selected from the group consisting of a microvoltage potential detector, a transceiver, a microcurrent detector, an ultrasonic transducer, a microprocessor control unit, a nanoparticle sensor, a fluorophore, a chromophore, a nanotube, or a quantum dot.

51. The complex as recited in claim 47 wherein said dendrimer consists essentially of a metal.

52. The complex as recited in claim 47 wherein said dendrimer consists essentially of a polymer that is coated with nanoparticles of a material selected from the group consisting of metal or semiconductor.

53. The complex as recited in claim 47, wherein said complex is incorporated into an encapsulating agent.

54. The complex as recited in claim 47, wherein said complex is transfected into a cell.

55. The complex as recited in claim 54 wherein said cell is located within a organism comprised of more than one cell.

56. The complex as recited in claim 54 wherein said cell is located in a cell culture apparatus.

57. The complex as recited in claim 47 wherein said polypeptide is comprised of a plurality of proteins.

58. The complex as recited in claim 57 wherein said plurality of proteins is an extracellular matrix.

59. The complex as recited in claim 58 wherein said extracellular matrix is comprised of a plurality of collagen molecules.

60. The complex as recited in claim 58 wherein said extracellular matrix is comprised of a plurality of fibronectin molecules.

61. The complex as recited in claim 57 wherein said plurality of proteins is a cellular cytoskeleton.

62. The complex as recited in claim 61 wherein said cytoskeleton is comprised of a plurality of tubulin molecules.

63. The complex as recited in claim 61 wherein said cytoskeleton is comprised of a plurality of actin molecules.